

FORCE



TRANSPORTATION CORPS



*Chief of Transportation
BG Gilbert S. Harper*





Strategic Transportation



If you look at war as a sport....

"In 1939, Hitler had the best Army, the best equipment, the best organization and the whole country behind him. But in 1945, Berlin stood in ruins because Hitler could not win on the road."

—Marv Levy, former Head Coach, Buffalo Bills.



**..... A power projection
Army must be able to win
on the road.**

“A task without vision is drudgery.

A vision without a task is a dream.

A task with a vision is victory.”

— Unknown



AMERICA'S ARMY TRANSPORTATION CORPS *STRATEGIC VISION*



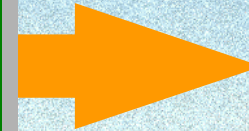
- **The Transportation Corps** will lead America's Army in the transition to an integrated, transportation-based global distribution system capable of efficient operations in peace and war. It will serve as a combat force multiplier by anticipating and fulfilling wartime theater support demands with unprecedented speed and flexibility.
- **The Transportation Corps** will lead in the development of force deployment, transportation-based distribution doctrine and integrated training. It will emphasize increased velocity through modernization, synchronization and adaptability in support of our force projection Army.
- **The Transportation Corps** will leverage emerging technologies and thrive on the digitized battlefield. It will provide movement control and direct delivery to deployed forces in a dynamically fluid, nonlinear battlefield in Force XXI and into the Army After Next.
- **The Transportation Corps'** soldiers and civilians will lead and perform multifunctional and joint logistics roles. Professional development will produce ethically, technically and tactically sound leaders.
- **The Transportation Corps** will lead the Department of Defense in deployment and power projection training and education. The Transportation Corps' soldiers and civilians will provide the professional transportation and distribution logistics expertise in Joint Commands and Defense Agencies.

GILBERT S. HARPER
Brigadier General, U.S. Army
Chief of Transportation

THE TASK Dominant

*The Army Must Be Able To
Simultaneously Project,
Sustain and Fight...*

Maneuver



- 1 Light Brigade by C+4
- 1 Light Division by C+12
- 1 Heavy Brigade Afloat by C+15
- 2 Heavy Divisions from CONUS by C+30
- 5 Division Contingency Corps with CSS by C+75



Army Deployment Comparisons

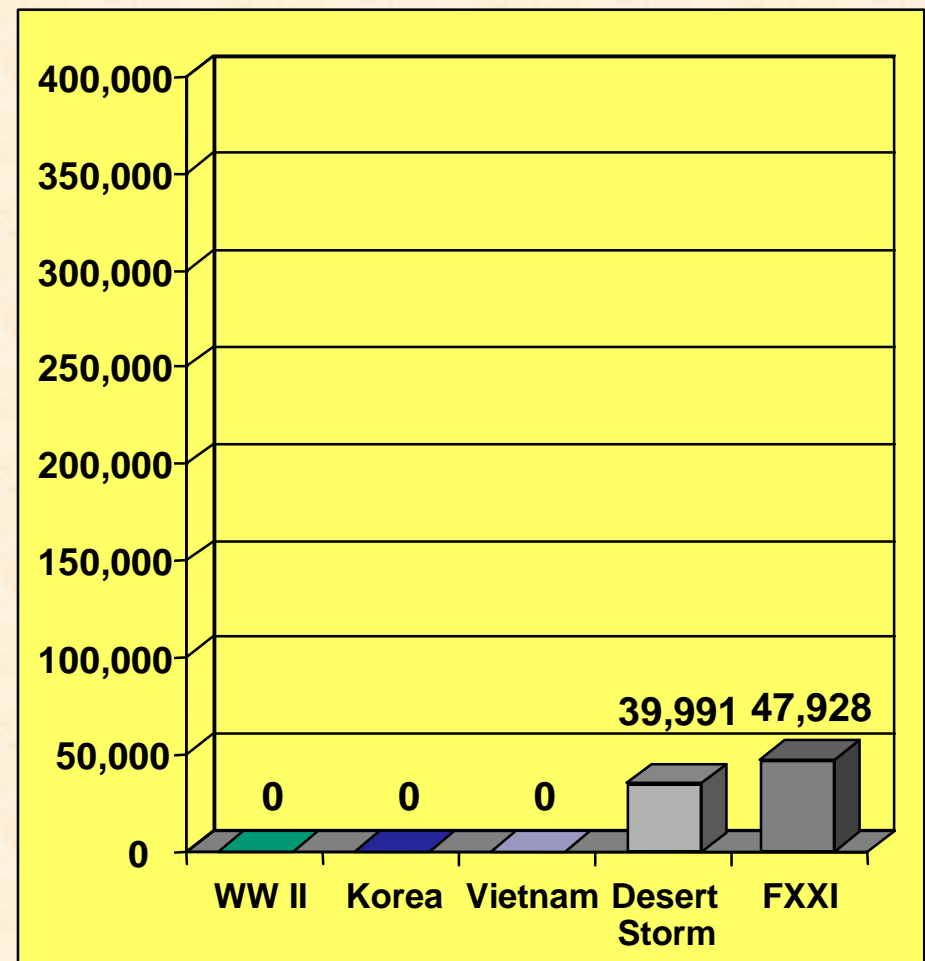
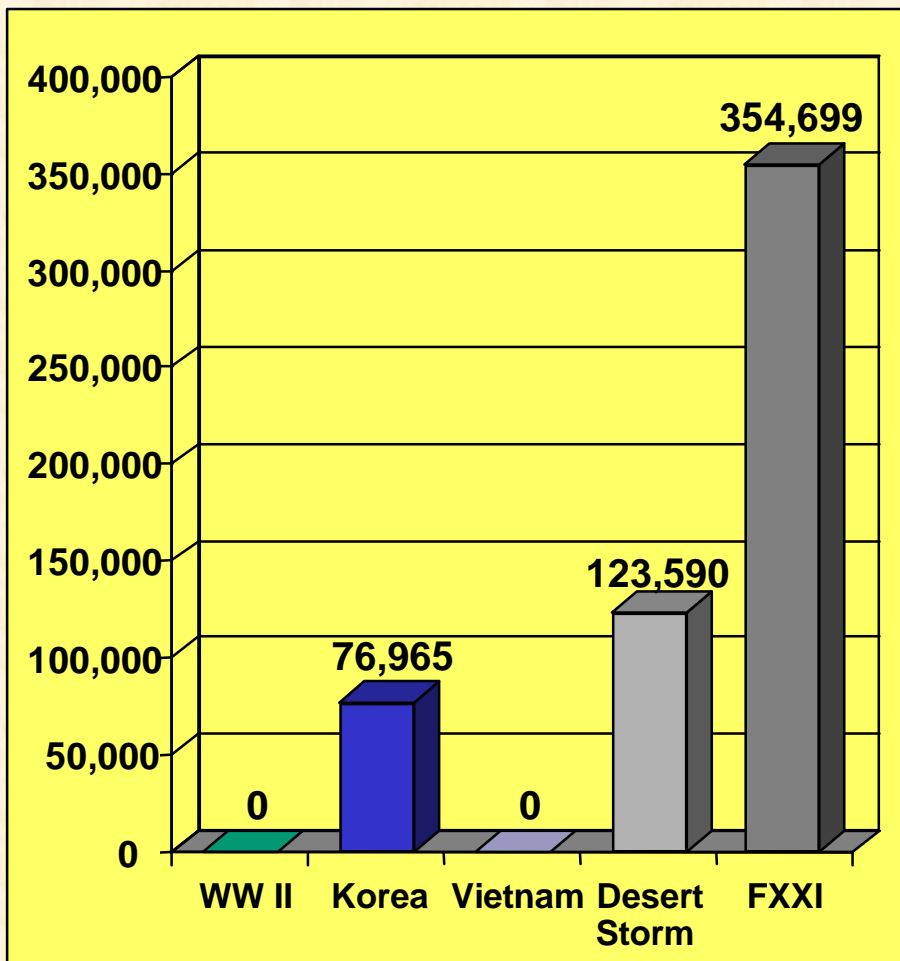
Tons of Supplies & Equipment

First 30 Days



SEALIFT

AIRLIFT



Force Projection Process

T = Today
F = Force XXI
A = Army After Next

T: Compo 4
Multi Compo

T: ASMP
ICODES
WPS

T: C17
F: Ultra-heavy AL
A: Lighter, Less

T: CTC

T: C130/C17
F: C130J
A: SSTOL

TC UNITS
DEPLOYING
UNITS

ICONUS

APOE

ASPO

AIRLIFT

APCD

SEALIFT

ASPO

Cargo Transfer Mvt Ctr

Theater Air

Rail

Highway

Waterway

AIR
HIGHWAY

T: SEDRE/NTC Rotation

F: TC-AIMS II

T: LMSR

F: HSS - 40

A: HSS - 70
Lighter & Less

T: Watercraft
RIB
MCS

F: JMLS

T: MTS
TC AIMS II

F: Redesign

T: Watercraft

T: FMTV
CROP/PLS/LHS
CHU

F: Hybrid engines
Electric Brakes
Greater Mob Speed
Land Trains

A: Fuel Efficiency
Greater Mob Speed
Powered Trailers
Leader-Follower
Technology

CONUS

STRATEGIC LIFT

THEATER

TACTICAL AREA

Force Projection

GTN

TC AIMS II

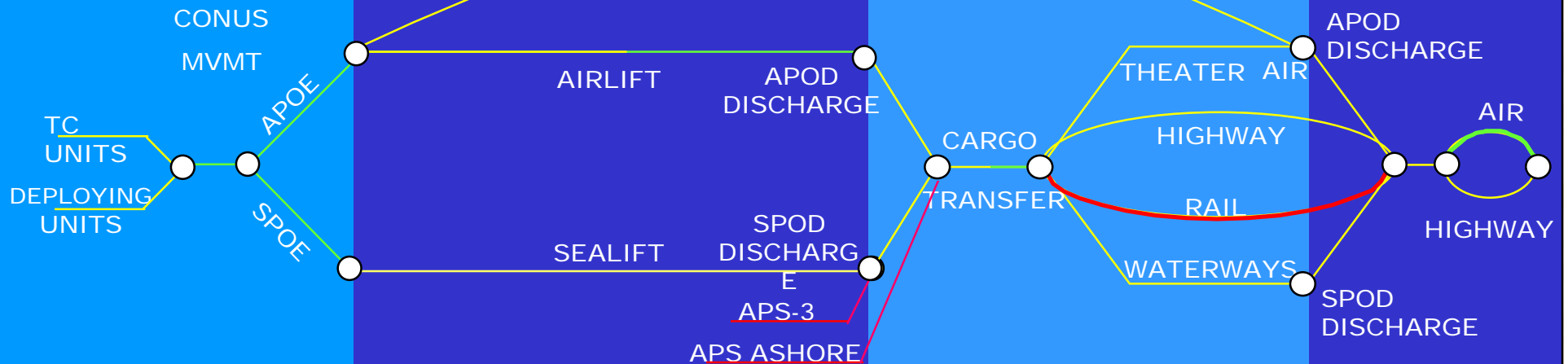
TC AIMS II

ACOM

USTRANSCOM
(MTMC, AMC, MSC)

CINC

THROUGHPUT AIRLIFT



FM 100-17

(Mob, Deploy, Redeploy, Demob)

Force Projection Doctrine

FM 100-17-1

(Army Prepo Afloat)

FM 100-17-2

(Army Prepo Ashore)

FM 100-17-3

(RSO&I)

FM 100-17-4

(Deployment - Fort to Port)

FM 100-17-5

(Redeployment)

CONUS

STRATEGIC LIFT

THEATER

TACTICAL AREA

Operational and Tactical Transportation

Transportation
Based
Logistics



The Future

"The Future ain't what it used to be"

— Yogi Berra

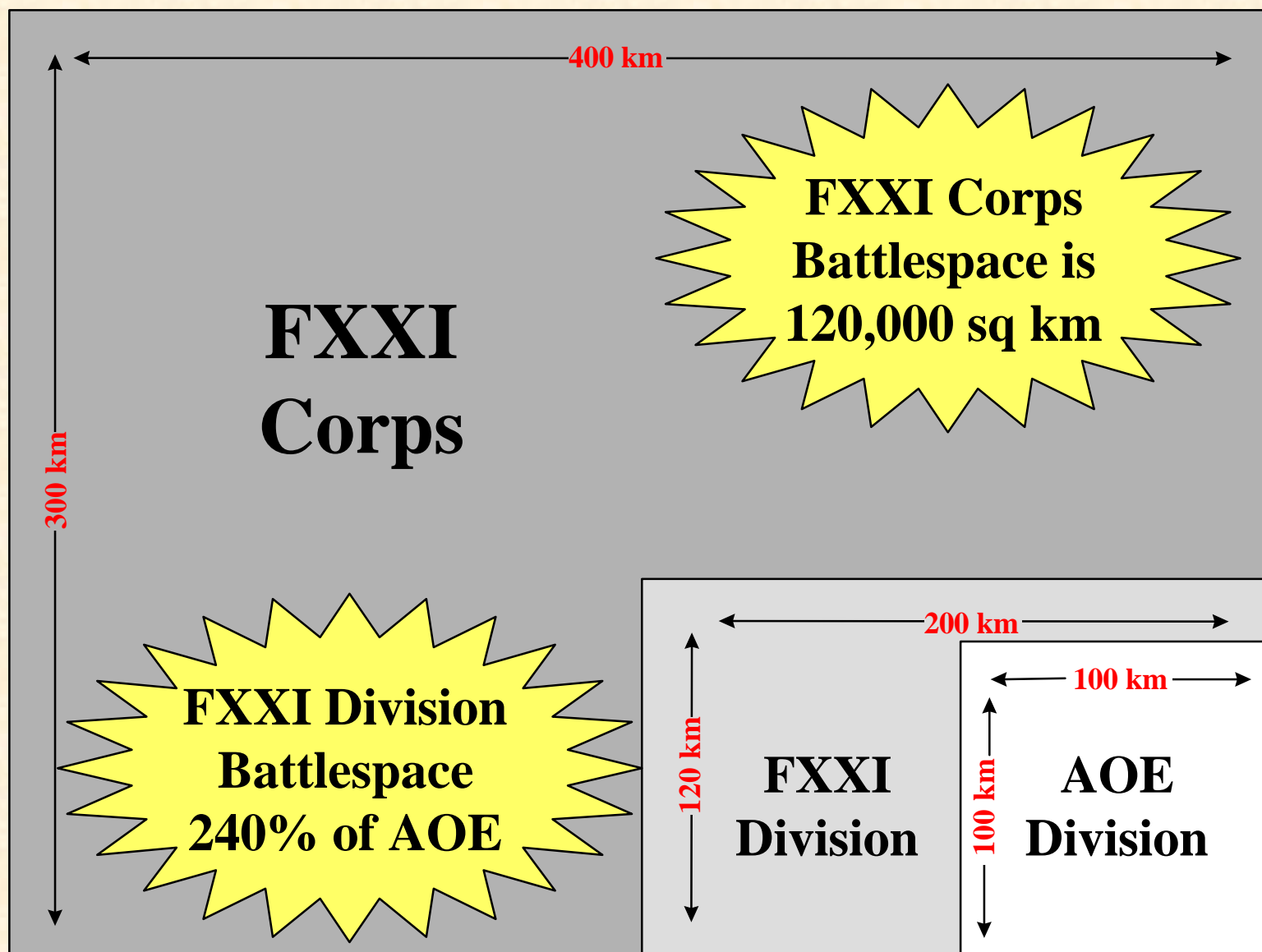




BATTLESPACE

Force XXI

The Expanding Battlefield

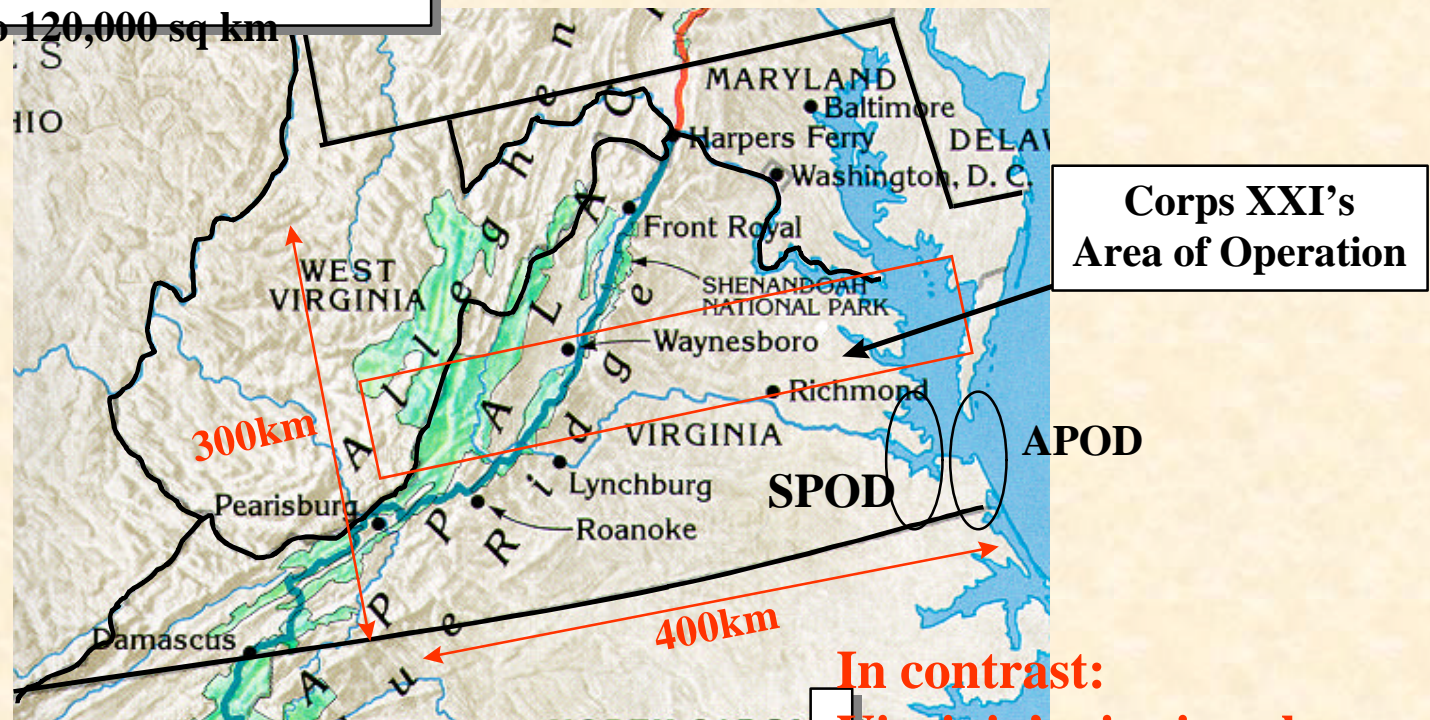


Challenging The Laws of Physics

FXXI:

Corps XXI's area is 300km x 400km

This equates to 120,000 sq km



In contrast:
Virginia's size is only
105,586 sq km

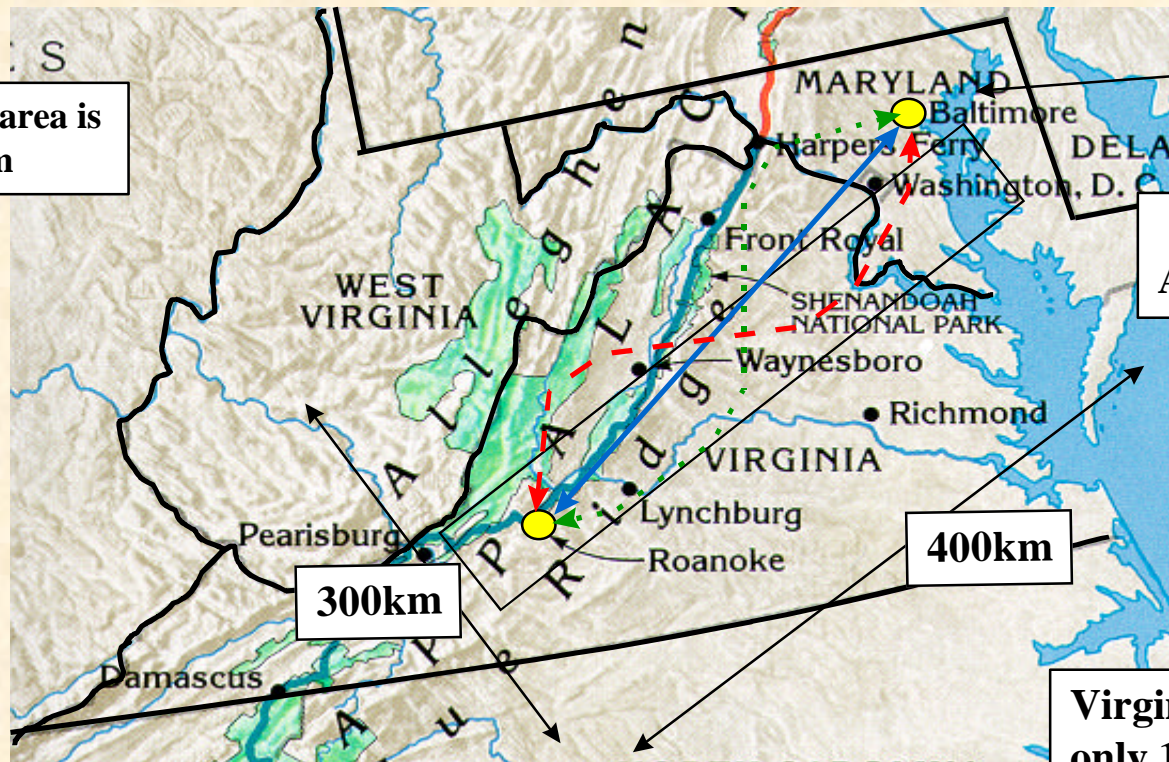
Road Distance

The Rest of the Story

Corps XXI's area is
120,000 sq km

SPOD

Corps XXI's
Area of Operation



Virginia's size is
only 105,586 sq km

Distance:

Straight Line

370

km

Interstate

(40km/hr)

483

km

12 hrs

Secondary Rd

(25km/hr)

579

km

23 hrs

A decorative graphic of a scroll is positioned on the left side of the slide. The scroll is white with a black outline and is partially unrolled, showing a white interior. The top of the scroll is rolled up, and the bottom is also rolled up, with the middle section being flat and containing the text.

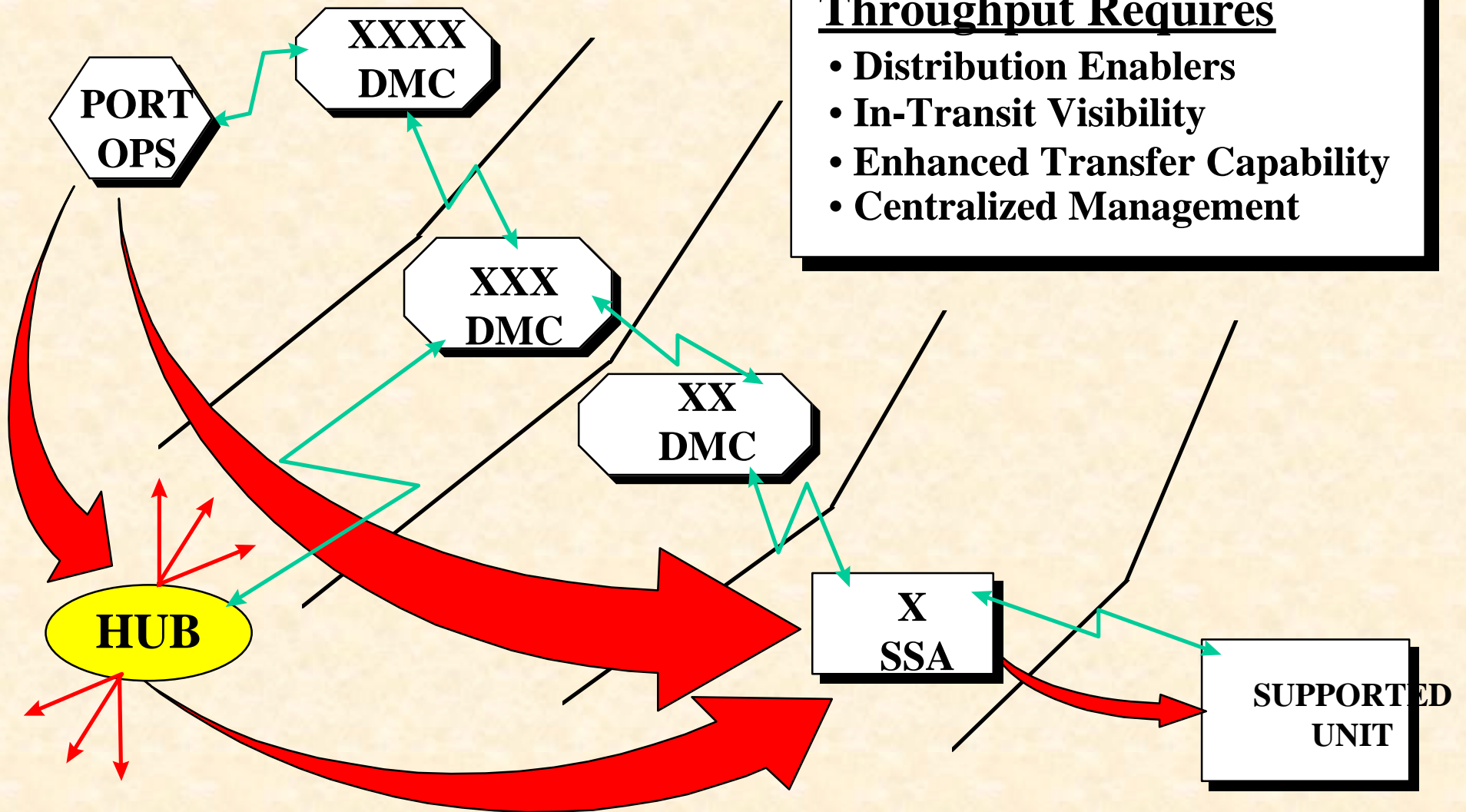
TRANSPORTATION BASED LOGISTICS

Force XXI

Focused On Throughput

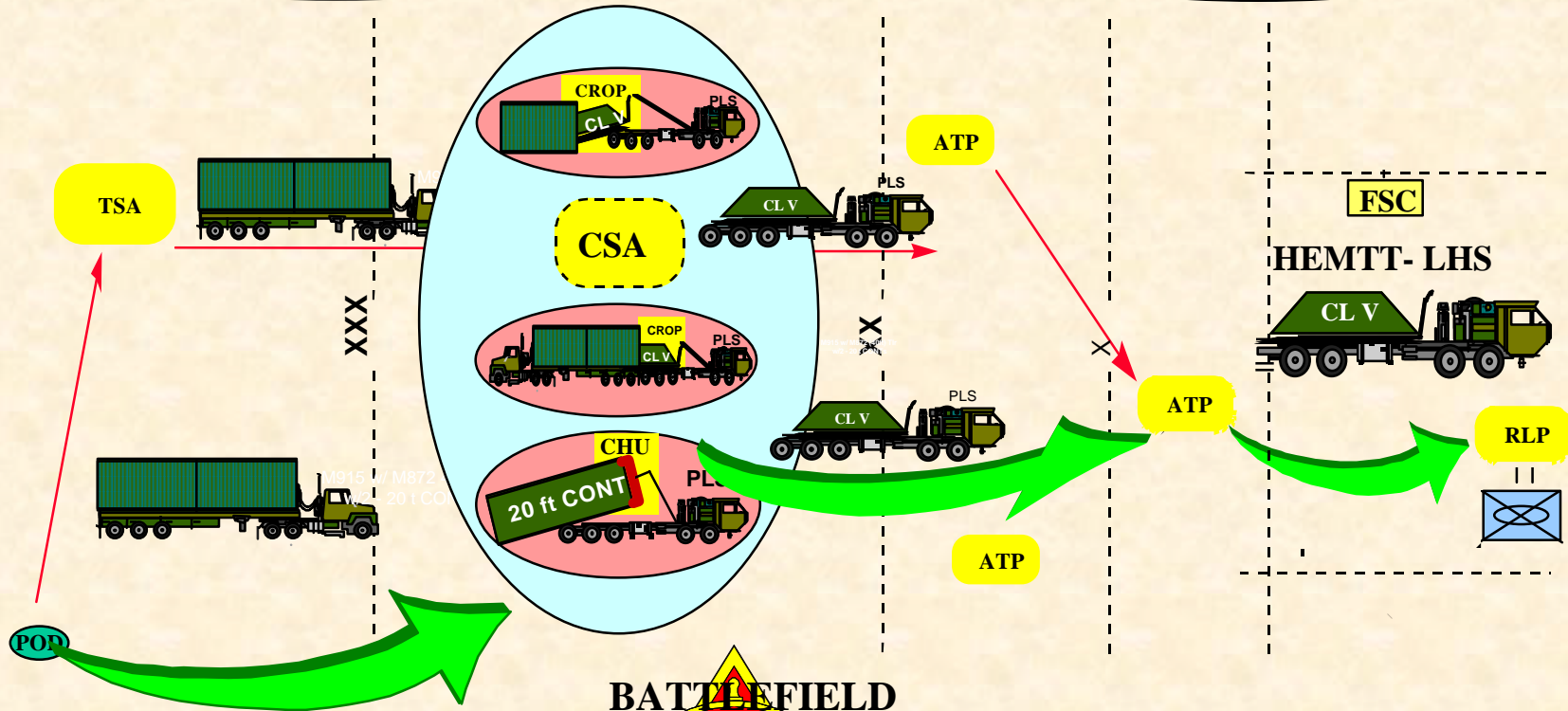
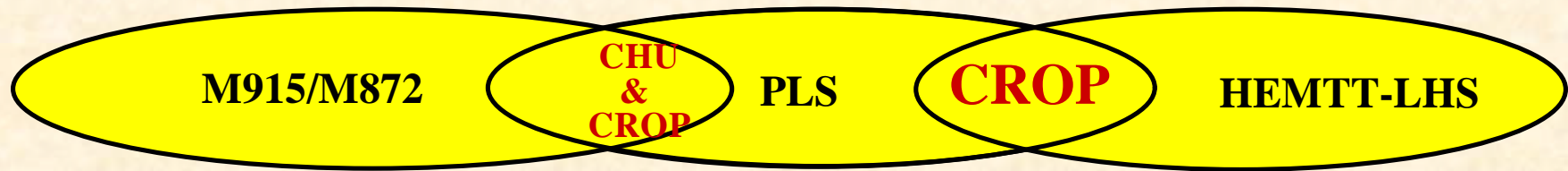
Throughput Requires

- Distribution Enablers
- In-Transit Visibility
- Enhanced Transfer Capability
- Centralized Management



Battlefield Distribution Enablers

Linkage



“REVOLUTION IN
MILITARY
LOGISTICS”



“REVOLUTION IN
MILITARY
AFFAIRS”

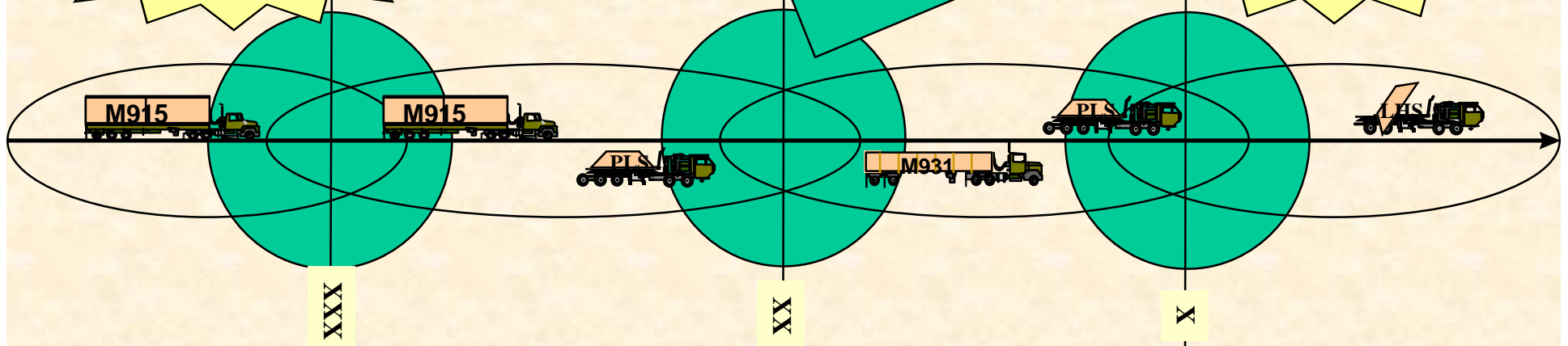
Intermodal Transfer Challenges

**Need
Enhanced
Transfer
Capability**

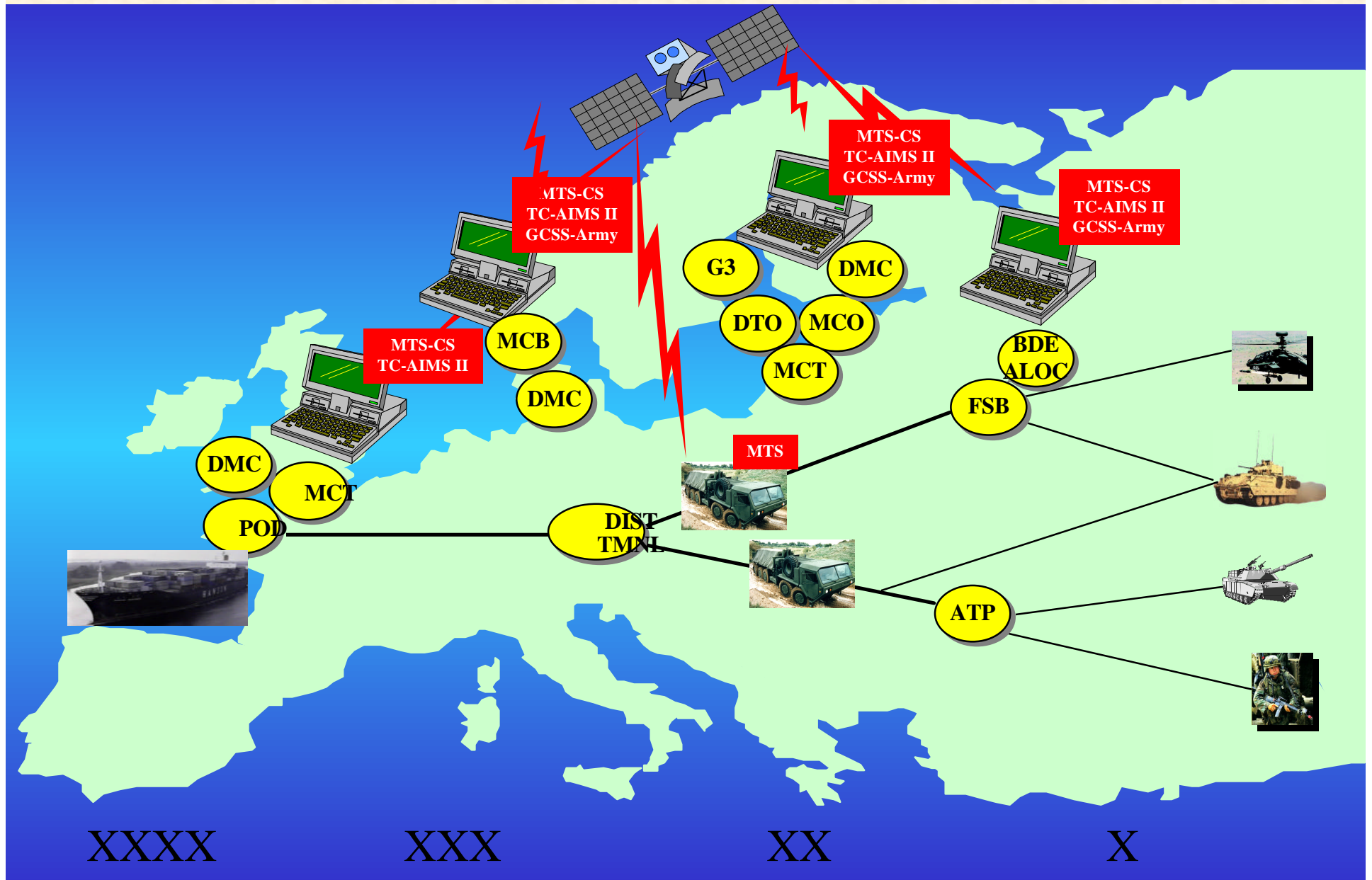
- Transfer from tractor/trailer to PLS/LHS
- Container Handling
 - 40 ft Containers
 - CROP Insertion/Extraction
- Transporting Container Handling Equipment
- Air Transportability
- Rough Terrain
- Mud

Minimize Handling

Maximize Speed



In-Transit Visibility





Increased Optempo



Smaller Force




Velocity

"We only win at war because we fight another government. If we fought private industry we would not last until noontime."

— R.I. Fitzhenry

We need industries help



Force Projection



Greater Distances



Declining Budgets

What Can Industry Do to Make our TWV's Better?

✎ Increased Range

- Division battle space increased by 240%
- Need Larger fuel capacity
- More fuel efficient engines

✎ Increased reliability

- Need reduced mechanical failures
- Improved sub-component reliability
- reduce the number of critical parts
- Combine/simplify subsystems to reduce failure modes

✎ Lightweight & Rugged

- Larger battle-space
- More dependence on air transport
- Must withstand effects of terrain

✎ Better maintainability

- 11% fewer Division personnel
- Limited number of vehicles – no extras
- Improve diagnostics/prognostics
- Improve trouble-shooting methods
- Quick replacement parts and components
- Lube for life components

✎ Better fuel economy

- Army Goal-50% reduction in fuel consumption
- More fuel efficient power plants

✎ Reduced O&S Cost

- Less Defense \$
- Better to buy beans and bullets than wiper blades
- Top O&S drivers for trucks – batteries, tires, light bulbs, brake pads, and glow plugs.

✎ Increase Economic Useful Life

- Short \$ - can't buy new as often.
- Modernization through spares
- Increased corrosion protection

✎ Modularity

- Same as maintainability
- Must replace forward, fix to the rear

✎ Crew Protection

- Protect crew from injuries
- Improved vehicle survivability
- Lighter weight protection to increase payload

Goals & Objectives

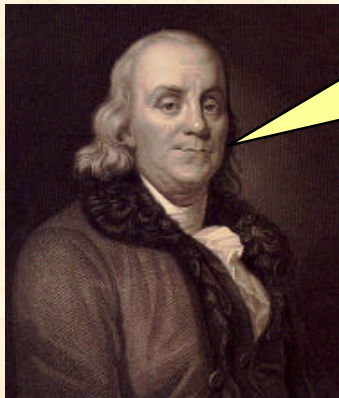


**Transportation Summit
16-17 DEC 1998
TACOM**

- Improve the communications between the Combat Developer and Materiel Developer.
- Achieve a stronger alliance with industry.
- Develop a team strategy to efficiently adopt commercial technology in the "Spiral Modernization" of our legacy fleets.
- Speak with one voice

"We must indeed all hang together, or, most assuredly, we shall all hang separately."

--Benjamin Franklin's reply in response to a John Hancock remark that the revolutionaries should be unanimous in their action; made at the signing of the Declaration of independence on July 4, 1776.



Army Tactical Wheeled Vehicle Community

